

Title (en)  
MEDIUM-FREQUENCY TRANSFORMER WITH DRY CORE

Title (de)  
MITTELFREQUENZTRANSFORMATOR MIT TROCKENEM KERN

Title (fr)  
TRANSFORMATEUR DE FRÉQUENCE MOYENNE À C UR SEC

Publication  
**EP 3364430 A1 20180822 (EN)**

Application  
**EP 17156713 A 20170217**

Priority  
EP 17156713 A 20170217

Abstract (en)  
A transformer (1) is provided, which comprises a tank (10) having an enclosed volume (11) with an insulating material (13), the tank (10) comprising at least one channel (25) extending through the tank (10), wherein the interior of the at least one channel (25) is separated from the enclosed volume (11) of the tank (10) by a channel wall (17). A transformer core (30) is provided outside of the enclosed volume (11), comprising at least one core leg (32) extending through the tank (10) via the at least one channel (25). At least one coil (50, 52) is located inside the enclosed volume (11), the coil (50, 52) being wound about the at least one channel (25), wherein the tank (10) has an inner wall or outer wall (16) comprising a semiconductive layer (40), which comprises fibers (42) embedded in an impregnating material (44).

IPC 8 full level  
**H01F 27/02** (2006.01)

CPC (source: EP KR RU US)  
**H01F 27/02** (2013.01 - EP US); **H01F 27/025** (2013.01 - KR RU); **H01F 27/24** (2013.01 - US); **H01F 27/28** (2013.01 - US); **H01F 27/327** (2013.01 - US); **H01F 27/34** (2013.01 - KR); **H01F 27/025** (2013.01 - EP); **H01F 27/34** (2013.01 - EP); **H01F 2027/348** (2013.01 - EP KR); **Y02E 10/56** (2013.01 - EP)

Citation (search report)  
• [X] US 6324851 B1 20011204 - SZASZ PAUL [DE], et al  
• [A] EP 1729310 A1 20061206 - STS SPEZIAL TRANSFORMATOREN ST [DE]  
• [A] US 2011043312 A1 20110224 - YANG TAE-JIN [KR]

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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3364430 A1 20180822**; AU 2018222793 A1 20190919; AU 2018222793 B2 20221006; BR 112019015790 A2 20200317; BR 112019015790 A8 20221213; BR 112019015790 A8 20221227; BR 112019015790 B1 20240130; CA 3053868 A1 20180823; CN 110268487 A 20190920; CN 110268487 B 20220913; JP 2020507932 A 20200312; JP 7086090 B2 20220617; KR 102519248 B1 20230406; KR 20190113975 A 20191008; MX 2019008964 A 20191211; RU 2019129117 A 20210317; RU 2019129117 A3 20210422; RU 2748606 C2 20210528; US 11557428 B2 20230117; US 2019371517 A1 20191205; WO 2018150027 A1 20180823

DOCDB simple family (application)  
**EP 17156713 A 20170217**; AU 2018222793 A 20180219; BR 112019015790 A 20180219; CA 3053868 A 20180219; CN 201880012355 A 20180219; EP 2018054038 W 20180219; JP 2019544671 A 20180219; KR 20197027031 A 20180219; MX 2019008964 A 20180219; RU 2019129117 A 20180219; US 201916537868 A 20190812